

What is claimed is:

1. An interactive voice response system for a telecommunications system, comprising:

an adjunct processor that outputs an output data stream to user;

a speech gateway enabling system comprising:

5 a speech recognition engine operable to identify words in an input voice stream received from the user on a first communication path extending between the user and the speech gateway enabling system and

10 a speech gateway controller operable (a) to transfer at least a portion of the input voice stream from the first communication path to a second communication path extending between the speech gateway enabling system to the adjunct processor and (b) to transfer the at least a portion of the input voice stream from the first communication path to the speech recognition engine for processing.

2. The interactive voice response system of Claim 1, wherein the speech gateway enabling system comprises a speech digitizer that converts the input voice stream from analog to digital form.

3. The interactive voice response system of Claim 1, wherein the first and second communication paths are configured by a switching system.

4. The interactive voice response system of Claim 1, wherein the speech enabling gateway system comprises grammar correlating a plurality of words with a corresponding plurality of DTMF codes in the command set of the adjunct processor.

5. The interactive voice response system of Claim 3, wherein switching system comprises a plurality of communication ports and the first communication path extends between first and second communication ports of the switching system and the second communication path extends between different third and fourth communication ports of the switching system.

6. The interactive voice response system of Claim 1, wherein the speech enabling gateway controller is also operable (c) to transfer at least a portion of the output data stream from the second communication path to the first communication path.

7. A method of providing interactive voice response capability in a telecommunications system, comprising:

(a) directing to a speech recognition engine at least a portion of an input voice stream received from a user on a first communication path extending between the user and a first adjunct processor;

(b) detecting at least some of the words in the at least a portion of the input voice stream;

(c) transferring the input voice stream to a second communication path extending between the first adjunct processor and a second adjunct processor;

(d) comparing at least some of the detected words with a grammar, the grammar correlating a plurality of words with a corresponding plurality of DTMF codes, to identify corresponding DTMF codes for each of the at least some of the detected words; and

(e) transmitting a DTMF signal corresponding to at least one identified DTMF code on a second communication path extending between the first adjunct processor and the second adjunct processor.

8. The method of Claim 7, wherein the directing and transferring steps occur at least substantially simultaneously.

9. The method of Claim 7, wherein the grammar further includes at least one switch symbol for at least one of enabling and disabling the directing step (a).

09917576-072701

10. The method of Claim 7, further comprising:

(f) converting the input voice stream from an analog form to a digital form.

11. The method of Claim 7, further comprising:

(f) configuring the first communication path for a first communication session initiated by the user with the first adjunct processor; and

(g) thereafter configuring the second communication path for a second communication session, initiated by the first adjunct processor, between the first and second adjunct processors.

12. The method of Claim 7, further comprising:

(f) transferring an output data stream from the second communication path to the first communication path.

13. The method of Claim 12, wherein transferring steps (b) and (e) occur at least substantially simultaneously.

14. The method of Claim 7, further comprising:

(f) muting the first communication path when the transmitting step (d) is performed.

09917576-072701
T0220-9252150

15. The method of Claim 7, further comprising:

(f) determining if the output from the speech recognition engine includes a switch symbol; and

(g) when the output includes a switch symbol, at least one of enabling or
5 disabling the directing step (a).

16. The method of Claim 7, further comprising:

(f) determining if one of the first and second communication paths has been disconnected; and

(g) when one of the first and second communication paths has been disconnected,
5 disconnecting the other of the first and second communication paths.

09917576-072701
FOI/2019-072701

17. A system of providing interactive voice response capability in a telecommunications system, comprising:

first and second adjunct processors;

a speech recognition engine that detects at least some words in an input voice stream
5 received from a user on a first communication path extending between the user and the first adjunct processor;

comparing means for comparing at least some of the detected words with a grammar, the grammar correlating a plurality of words with a corresponding plurality of DTMF codes, to identify corresponding DTMF codes for each of the at least some of the detected words;

10 directing means for directing to the speech recognition engine at least a portion of the input voice stream;

transferring means for transferring the input voice stream to a second communication path extending between the first adjunct processor and the second adjunct processor; and

transmitting means for transmitting a DTMF signal corresponding to at least one
15 identified DTMF code on a second communication path extending between the first adjunct processor and the second adjunct processor.

18. The system of Claim 17, wherein the grammar further includes at least one switch symbol for at least one of enabling and disabling the directing means.

19. The system of Claim 17, further comprising:

converting means for converting the input voice stream from an analog form to a digital form.

20. The system of Claim 17, further comprising:

configuring means for configuring the first communication path for a first communication session initiated by the user with the first adjunct processor and thereafter configuring the second communication path for a second communication session, initiated
5 by the first adjunct processor, between the first and second adjunct processors.

21. The system of Claim 17, further comprising:

transferring means for transferring an output data stream from the second communication path to the first communication path.

22. The system of Claim 17, further comprising:

muting means for muting the first communication path when the transmitting means transmits DTMF signals.

23. The system of Claim 17, further comprising:

determining means for determining if the output from the speech recognition engine includes a switch symbol; and

when the output includes a switch symbol, means for at least one of enabling or
5 disabling the directing means.

24. The system of Claim 17, further comprising:

means for determining if one of the first and second communication paths has been disconnected; and

when one of the first and second communication paths has been disconnected, means for disconnecting the other of the first and second communication paths.

09917576-072701
T04240-9252T650